

ABSTRACT OF THE DISCLOSURE

A turbineless jet engine includes no internal moving components, yet operates using a continuous combustion principle. The present engine is self-starting, i.e., no auxiliary source of pressurized airflow or unconventional fuels is required for its starting and operation. The present engine also requires no electrical energy after the combustion process has been initiated, with its fuel pump being operated by exhaust air from the engine. Starting injectors entrain airflow through the engine, with a portion of the inlet air being drawn through radially disposed, hollow pressure generators to the combustion section of the engine. Exhaust gas is recirculated to the front of the engine and passed through the pressure generators to entrain fresh air, to continue the cycle of operation. The present engine may be constructed in a variety of non-circular cross-sectional shapes, with or without inlet vane sweep, as desired, due to its lack of internal rotating components.